REMARKS

[0001]   Applicant respectfully requests entry of the following remarks and reconsideration of the subject application. Applicant respectfully requests entry of the amendments herein. The remarks and amendments should be entered under 37 CFR. § 1.116 as they place the application in better form for appeal, or for resolution on the merits.

[0002]   Applicant respectfully requests reconsideration and allowance of all of the claims of the application. Claims 1-31 are presently pending. Claims amended herein are 1, 3, 4, 9, 13, 14, and 19. Claims 8, 10 and 11 are cancelled herein, and no claims are withdrawn. No new claims are added herein .

Statement of Substance of Interview

[0003]   The Examiner graciously talked with me—the undersigned representative for the Applicant—on 30 December 2008. Applicant greatly appreciates the Examiner's willingness to talk. Such willingness is invaluable to both of us in our common goal of an expedited prosecution of this patent application.

[0004]   During the interview, I discussed how the claims differed from the cited references. Without conceding the propriety of the rejections and in the interest of expediting prosecution, I also proposed several possible clarifying amendments.

[0005] I understood the Examiner to tentatively agree that independent claim 1 would be patentable over the cited art if amended as discussed during the interview.

[0006] Applicant herein amends the claims in the manner discussed during the interview. Accordingly, Applicant submits that the pending claims are allowable over the cited references of record for at least the reasons discussed during the interview.

Formal Request for an Interview

[0007] If the Examiner's reply to this communication is anything other than allowance of all pending claims, then I formally request an interview with the Examiner. I encourage the Examiner to call me—the undersigned representative for the Applicant—so that we can discuss this matter so as to resolve any outstanding issues quickly and efficiently over the phone.

[0008] Please contact me to schedule a date and time for a telephone interview that is most convenient for both of us. While email works great for me, I welcome your call as well. My contact information may be found on the last page of this response.

Claim Amendments

[0009] Without conceding the propriety of the rejections herein and in the interest of expediting prosecution, Applicant amends claims 1, 3, 4, 9, 13, 14, and 19herein. Applicant amends claims to clarify claimed features. Such amendments are made to expedite prosecution and more quickly identify

allowable subject matter. Such amendments are merely intended to clarify the claimed features, and should not be construed as further limiting the claimed invention in response to the cited references.

[0010]   Claim 1, is amended to include subject matter from dependent claims 10 and 11.

Formal Matters

Claims

[0011]   The Examiner objects to claims 1-14, 16, 18, and 19. Each objection is addressed below and the applicant requests that these objections be removed.

[0012]   The Examiner objects to claim 1 based on a lack of antecedent basis. The applicant herein amends claim 1 in response to this objection. Applicant request that the objection to claim one be removed.

[0013]   Claims 2-12 are objected to as being dependent upon objected claim 1. As claim 1 has been corrected by amendment, applicant respectfully requests that the objections to claims 2-12 also be removed.

[0014]   Claims 3 and 4 are rejected in light of a typographical error. Applicant herein amends claims 3 and 4 to correct the any error. The applicant respectfully requests that the objections to claim 3 and 4 be removed.

[0015]   Claim 10 is objected to based on less than clear wording. The subject matter of claim 10 is herein incorporated into claim 1. The objection to claim 10 is thereby moot.

[0016]   Claims 11, 13, 14, 16, 18, and 19 are objected to for containing a typographical error. This error was introduced inadvertently in intervening claim listings. The set theory union symbol has been restored in the current claim listing at it was represented in the original claim listing. The correction of this typographical error does not impact the interpretation or scope of the claims.

[0017] Claims 13, 14 and 19 are objected to based on the readability of the word order. Applicant herein amends claims 13, 14 and 19 to improve the readability of the claims. This amendment in no way impacts the interpretation or scope of the claims. Applicant respectfully requests the Examiner to remove the objections to these claims.

Substantive Matters

Claim Rejections under § 103

[0018] The Examiner rejects claims 1-31 under § 103. For the reasons set forth below, the Examiner has not made a prima facie case showing that the rejected claims are obvious.

[0019] Accordingly, Applicant respectfully requests that the § 103 rejections be withdrawn and the case be passed along to issuance.

[0020] The Examiner's rejections are based upon the following references combination:

- **Hotti:** *Hotti,* US Patent No. 6,970,876 (issued November 29, 2005);
- **Baisley:** *Baisley,* US Patent No. 6,415,299 (issued July 2, 2002);
- **Set Theory:** *Set Theory,* http://plato.stanford.edu/entries/set-theory/ Stanford Encyclopedia of Philosophy, July 2002;
- **Durbin:** *Durbin, Oracle8i Distributed Database Systems Release 8.1.5,* February 1999; and

- **Carey:** *Carey,* US Patent No. 6,947,945 (issued September 20, 2005).

Overview of the Application

[0021]   The Application describes a technology for managing multiple versions of relational database schema data. Schema data associated with multiple versions of the relational base of database are maintained according to a database schema version management structure. Laws of set theory are applied to the structured database schema data to identify scripts that are associated with a particular version of a relational database. These scripts can then be executed to create a full installation of the particular version of the relational database. [Abstract]

Cited References

[0022]   The Examiner cites Hotti as the primary reference in the obviousness-based rejections.   The Examiner cites Set Theory as secondary references in the obviousness-based rejections.

Hotti

[0023]   Hotti describes a technology for managing multiple installed distributed databases, and the synchronized configuration management of the schema of the distributed database nodes.

Set Theory

[0024]   Set Theory is a book on the topic of the basic concepts and principles of set theory.

Obviousness Rejections

Lack of *Prima Facie* Case of Obviousness (MPEP § 2142)

[0025]   Applicant disagrees with the Examiner's obviousness rejections. Arguments presented herein point to various aspects of the record to demonstrate that all of the criteria set forth for making a prima facie case have not been met.

Based upon Hotti, Baisley and Set Theory

[0026]   The Examiner rejects claims 1-6, 8, 10-20, 23-31 under 35 U.S.C. § 103(a) as being unpatentable over Hotti.   Applicant respectfully traverses the rejection of these claims and asks the Examiner to withdraw the rejection of these claims.

Independent Claim 1

[0027]   Applicant submits that combination of **Hotti, Baisley, and Set Theory** does not teach or suggest at least the following features as recited in this claim (in part and with emphasis added):

> "automatically determining a first set of scripts; the first set of scripts comprising data definition language (DDL) scripts associated with implementing the particular version of the relational database, wherein the scripts are selected from a plurality of scripts, one or

more of the plurality of scripts being not associated with implementing the particular version;

the determining comprising:

extracting a set A_1 comprising one or more filenames from metadata associated with a first version in the sequence, the one or more filenames associated with a file comprising a data definition language script associated with the first version;

iteratively extracting a set A_i comprising zero or more filenames from metadata associated with an ith version of the relational database, the zero or more filenames each associated with a file comprising a data definition language script to be executed when upgrading from version i-1 of the relational database to version i of the relational database, where i varies incrementally from 2 to j, where the particular version is j;

determining the first set of as the union by set theory of sets A_1, A_2, ..., A_j."

[0028]   As discussed and shown in the above mentioned Examiner interview, the emphasized portions of claim 1 are not taught or suggested by Hottie. Hottie teaches the extraction of scripts from the known database version for use in making the same changes in another instance of the database wherein the same changes described in the scripts need to be implemented. Hottie does not teach or suggest the iterative extracting of a set comprising zero or more filenames from metadata associated with an ith version of the relational database.

[0029] On page 5 of the current office action the Examiner states that Hottie does not disclose the following elements or features of claim 1:

"generating installation file comprising a set theory union of the first set and the second set"

[0030] The Examiner points to the reference Baisley as teaching these elements or features in column 2:14-19. This citation is reproduced below for convenience:

"the method comprises the steps of building a 1st list as a collection of versions that occur only in a history of the source version; and, building a 2nd list as a collection the version that only occur in the history of the target version. Next, a dual history is treated as a union of the 1st and 2nd lists."

[0031] While Baisley does teach the use of a union to combine two lists, this referencedoes not discuss, teach or suggest the generation of an installation file. Furthermore, the passage cited by the Examiner, when read in context, is discussing the combination of two histories of two different versions of an application stored in a source repository. The combination of these two histories results in a list of components of an application that are shared among the two versions. The result is not an installation file that would result in either one of the chosen versions. Rather, it would result in a third version comprising the common elements of both of the original versions. Therefore, in reading the Baisley citation in context, it is clear to one skilled in the art that the discussion

of unions and sets is a general one and does not teach or suggest the specific elements and features as recited in claim 1.

[0032]   Also on page 5 the Examiner states that Hottie does not disclose or suggest the use of a set theory union. Applicant agrees. The Examiner then goes on to improperly cite the reference "Set Theory" as disclosing set theory unions as recited in claim 1. The Applicant respectfully disagrees.

[0033]   This reference is merely a description of the principles of set theory itself, not a specific teaching or suggestion of unions as recited in amended claim 1. Merely citing the Set Theory for a general teaching of set theory unions does not provide a teaching or suggestion of a specific use of set theory unions which the Examiner has admitted is not taught or suggested in Hottie and Baisley.

[0034]   Accordingly, as shown above, the combination of **Hottie, Baisley, and Set Theory** does not teach or suggest all of the elements and features of this claim. Accordingly, Applicant asks the Examiner to withdraw the rejection of amended claim 1.

Independent Claim 13

[0035]   Applicant submits that combination of **Hotti, Baisley, and Set Theory** does not teach or suggest at least the following features as recited in this claim (with emphasis added):

"A method for generating **an upgrade file to upgrade version** i **of a relational database to version** j of the relational database, where $j > i$, the method comprising:

...

"**generating the upgrade file** comprising a union by set theory of sets A, B, C, and D (A $\bigcup$ B $\bigcup$ C $\bigcup$ D)."

[0036]   The Examiner points to the following locations within Hottie as teaching this claim feature: column 2:9-10, column 4: 49-58, and column 7:51-54. These locations, as well as Hottie in general, describe the extracting of scripts from a database that when executed on a database of similar design and state will implement the same features of the source database. One skilled in the art would recognize these scripts as being database scripts used to automate changes in the database and not an upgrade file.

[0037]   Hottie teaches using these scripts by executing them on other databases. The Examiner appears to equate these database scripts with the claimed generation of an upgrade file via a union of various sets of such scripts. The applicant respectfully disagrees.

[0038]   As would readily be appreciated by those of ordinary skill in the art, the usage of components is not equivalent to the combination of the components to create a new consolidated installation file via set theory.

[0039] On page 17 the Examiner states that Hottie fails to disclose generating an upgrade file comprising a set theory union of sets A, B, C, and D. the Examiner points to Baisley, column 2:14-19, as teaching this element or feature. The applicant respectfully disagrees. Baisley teaches the combination of two development paths within an application source code repository.

[0040] The result of the process taught by Baisley is a new set of files, not an installation file. Furthermore, if one were to follow known methods to compile this set of files into an operable application, the result would be a version of the application consistent with the new set of files and not with either of the versions designated prior to the combination of the sets of files.

[0041] In contrast, the instant application identifies a specific target version for which an installation file is desired and set theory is utilized to create such a file from multiple sets of available files associated with each version of the database between the initial version and the desired version, the initial version and desired version included. The result is an installation file that when executed results in the desired version. This is distinctly different then the new, previously non-existent version that is the result of the combination taught by Baisley.

[0042] The applicant respectfully submits that, as discussed above, Baisley does not remedy the stated deficiency of Hottie. Therefore, the combination of combination of Baisley and Hottie does not teach all of the elements and features of this claim. The Examiner goes on to cite "Set Theory" as teaching other deficiencies not taught by Hottie. As discussed above regard to claim 1, the inclusion of "Set Theory" does not add any value to the combination of Baisley

and Hottie as a mere reference to general principles of set theory is an insufficient teaching or suggestion of the particular use of set theory unions as recited in the claims. Therefore, applicant herein submits that the combination of Baisley, Hottie and "Set Theory" does not teach all of the elements and features of this claim. The applicant respectfully requests the Examiner to remove this rejection and pass the claim along to allowance.

Independent Claim 20

[0043]   Applicant submits that combination of **Hotti, Baisley, and Set Theory** does not teach or suggest at least the following features as recited in this claim (with emphasis added):

>   **an installation file generator** stored in the memory and executed on the processor to apply laws of set theory to the schema data to generate a file comprising the one or more DDL scripts associated with a particular one of the multiple versions of the relational database, and the one or more DML scripts associated with the particular one of the multiple versions of the relational database.

[0044]   Applicant submits that this feature of claim 20 is not taught or suggested by the combination of Hottie, Baisley, and set theory for at least similar reasons as given for the above independent claims. Furthermore, neither Hottie, Baisley, Set Theory, nor any combination thereof, teaches or suggests an

"installation file generator" that is stored in memory and executed on the processor.

[0045]	The Examiner points to Baisley, column 2:14 -- 19 as teaching this specific claims feature. Applicant respectfully disagrees. In this citation, Baisley discusses a method of building a collection of lists in the combination thereof with the result of a dual history. The applicant respectfully submits that a dual history, when read in context with the entirety of Baisley's teachings is not the equivalent of an installation file generator as claimed .

[0046]	As shown herein, Baisley does not teach or suggest aninstallation file generator. As stated by the Examiner, Hottie also does not teach the same. As discussed above, with regards to the other independent claims, the reference "Set Theory" does not add any new teachings to the combination of Baisley and Hottie. Therefore, the applicant respectfully submits that the combination of Hottie, Baisley, and Set Theory does not teach all of the elements and features of this claim. Consequently applicant requests that the Examiner remove the rejection of this claim and pass it along to allowance.

Dependent Claims

[0047]	If not addressed individually above, in addition to its own merits, each dependent claim is allowable for at least the same or similar reasons that its base claim is allowable. Applicant requests that the Examiner withdraw the rejection of each dependent claim where its base claim is allowable.

Conclusion

[0048] All pending claims are in condition for allowance. Applicant respectfully requests reconsideration and prompt issuance of the application. If any issues remain that prevent issuance of this application, the **Examiner is urged to contact me before issuing a subsequent Action**. Please call or email me at your convenience.

Respectfully Submitted,

Lee & Hayes, PLLC
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